



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,255	09/22/2003	Masaharu Yokono	242294US2	9511
22850	7590	11/02/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			BEATTY, ROBERT B	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2852	
NOTIFICATION DATE		DELIVERY MODE		
11/02/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/666,255	YOKONO, MASAHIRO	
	Examiner Robert Beatty	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 October 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 16-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ream '228 in view of and Ito (11-344875) and JP# 09-175687.

Ream teach a color printing device comprising a plurality of print cartridges 42,43,44,45 comprising photosensitive drums, developing devices 32 and image exposure devices for forming latent images on the photosensitive drums so as to be developed with toner by the developing units. The developed color toner images are transferred to an intermediate transfer belt 20. The transfer belt comprises a home position mark 75 on the belt, drive and follower rollers 40,54,41 and transfer rollers 50-53 for transferring the developed color toner images onto the intermediate transfer belt. The intermediate transfer belt is removable as a unit from the printing device and has a memory storage unit 80 as an EEPROM located thereon. Upon detecting that the transfer belt unit is installed in the printing device the controller of the printer will be put into communication with the storage memory 80 (col.1, lines 44-46). The memory will have velocity profiles for velocity correction and belt tracking profiles that will correct for differences in the position and color

registration of the transferred images (col.3, lines 58-59, col.5, lines 11-14). These profiles will be stored in the EEPROM at the time of manufacture. Specifically, Ream teach everything claimed except 1) transferring the stored data in the transfer unit memory to a memory of the image forming apparatus upon attachment of the transfer belt to the image forming apparatus, and 2) the velocity profile being an average velocity obtained by multiple velocity measurements along the rotation of the belt having a plurality of marks.

Ito teach an image forming apparatus having a detachable intermediate transfer body unit 5 with a memory 25 for storing data relating to the intermediate transfer body. When an intermediate transfer body is replaced with a new one (attached to the image forming apparatus), the data stored in the memory 25 is transferred to a CPU 26 of the image forming apparatus which inherently has a memory.

JP'687 teach an image forming apparatus using a belt for transporting a copy sheet or as an intermediate transfer belt (Fig. 5) wherein the belt has a plurality of marks along its outer periphery (Fig. 1) and sensors 5A, 5B to detect these marks. As disclosed in the abstract and at least in paragraphs 15-18, the velocity at a plurality of positions along the belt (e.g. for the complete rotation of the drive roller) will be measured and the average velocity will be calculated in order to control the belt.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transfer the data relating to the intermediate transfer unit in Ream upon attachment to the image forming apparatus because optimum conditions can be set with respect to the specific intermediate transfer belt attached as taught in Ito. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ream's stored velocity profile to include one obtained by calculating an average velocity by using a plurality of marks because a more accurate velocity detection can be obtained by taking into account periodic fluctuations of the instantaneous velocity measurements which would help with the maintaining of the transfer belt at a constant velocity and obtaining clear images (par. 36).

2. Applicant's arguments filed 10/12/2007 have been fully considered but they are not persuasive.

Applicant has amended the claims to include an average velocity measurement which required the examiner to conduct a new search. The newly found reference JP# 09-175687 is believed to teach applicant's new limitation.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is (571) 272-2130. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray, can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

/Robert Beatty/
Primary Examiner
Art Unit 2852

10/28/2007